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Original Articles.

THE PERSONAL EQUATION IN THE USE OF THE FORCEPS.

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My object in presenting this paper is to plead for the intelligent and skillful use of the forceps, and to show certain fallacies in the arguments of those who decry its use. From the beginning of my professional work it has been my lot to get many cases of difficult labor, and I came early to look upon this instrument as one of the most useful in our *armamentarium* and as a great blessing to many suffering women. Its application never seemed to me to be a difficult thing to learn, nor have I found any difficulty in deciding when to use it or to map out in my own mind a definite scheme of the indications which call for it.

I have always felt indebted to the teachings of Robert Barnes, whose "Obstetrical Operations," published over twenty years ago, gave me the clearest idea of the management of difficult labor. This book, I am sure, must be placed among the classics in our literature, and notwithstanding the immense strides which obstetrics has made in the last twenty-five years, studies which have kept step with the advances in the whole domain of surgery and medicine, this book can be read to-day with immense profit by student and

practitioner. I am glad to see that a little book on "Difficult Labor," by G. Ernest Herman, a concise and true epitome of the present state of obstetrics, draws largely from the "Obstetrical Operations." And with the exception of the larger field of Cæsarean section, due to improved surgical technique and antiseptics, and to the establishment of the question of symphysiotomy, whose application has been so thoroughly tested by the French school, the general indications for the forceps are practically the same to-day as they were when Barnes wrote his book. To be sure, we know better the dangers of the forceps when misapplied, we know better the evil results which follow this misapplication, and we know better how to guard against the all-important sepsis. We have, perhaps, a slightly better model, and we have the principle of the axis traction introduced by Tarnier, and yet the large majority of our cases fall under the general indications laid down twenty-five years ago.

It would be idle indeed for me to lay down these general indications as they are accepted to-day; they are plainly and succintly set forth in our text-books on the subjects. I contend, however, that these indications are really the indications in the abstract that they must vary more or less according to the skill and ability of the operator, and that, therefore, the utility and value of the forceps is a variable X depending upon the operator. The exact conditions in each case can never be exactly known or predicted. The operator, to know the problem at the time, must not only know the conditions of his patient, but he must know his own fitness or unfitness for operating. The patient remaining the same, the one case may call for an operation, while the other contraindicated it. In attempting to lay down these definite indications I find the authorities omit this important factor in the consideration of the case, this question of the operator himself. Take any tool, and the more skillfully it is handled the more useful and efficient it becomes. An ordinary jack-knife in the hands of a Swiss carver changes a block of wood into a work of art, while the same instrument in the hands of the ordinary boy, brings blood and pain. A good operator with a few instruments accomplishes more than a poor one with any amount of surgical *armamentarium*. Therefore, I say, the

important question is, can you use the forceps properly, rather than, are they indicated in this case?—for in the present state of your knowledge of obstetrics, the usual indications are clearly and precisely laid down and are easily enough learned, while one's individual skill must be acquired and consciously realized. And this is usually the last thing considered. Given a case with certain conditions and a good operator, and I should say, operate, while the same case with a poor operator, I should say wait. A case of stone had better wait a reasonable time for a good operator than be cut at once by one who knows not his work. While "Ventral Suspension of the Uterus" for malposition may be a legitimate operation in the hands of an operator like Howard Kelly, who has just reported a series of two hundred cases without a death, the same operation in the hands of a tyro, or one unfitted for any operative work, is contraindicated. Now the same reasoning applies, *mutatis mutandis*, to the forceps.

I have heard an obstetric teacher take every opportunity to discredit the forceps, and when the time came for him to show its application to his class, apply it improperly. Verily, from his standpoint the man was right, for he should never apply it himself unless there was absolutely no other remedy.

I have recently read a paper in the transactions of this Association which has a direct bearing on this point. A physician reports results in five hundred and ninety cases of labor where the forceps was not once applied, and who regrets its non-use but in one case, where he thinks the child might have been saved. Now there is much in that paper which I admire, the man's honesty, than which there is no greater virtue, his conscientiousness, a virtue equally as great, and his courage, too and yet I believe he does not know how to use the forceps, and that he has a subconscious sense of his incapacity. That out of these five hundred and ninety cases all the women were safely delivered simply proves that he practiced in a healthy locality, that his patients were good breeders, and that unaided nature can often work wonders. And I further contend, that had he had the most approved model of the forceps, and not left it at home, as he affirms, and had he had a conscious skill in its use, he might have saved some of these

women many hours of suffering, and not only without any injury to them, but with a distinct gain, and he might have saved the only still-born child to which he proudly points. His paper is surely a very significant one.

One of the glories of modern medicine is its power to relieve pain. Diseases which still defy a reduction in their death rate may at least be made less painful and more bearable. Drugs which cannot directly cure or shorten certain diseases can at least make the patient more comfortable. I contend that it is a legitimate function of the forceps to shorten a delivery and to relieve a patient of pain, and that it can be so used without injury to mother or child. That this use of the forceps, outside the domain of absolute necessity, demands greater judgment and discrimination and, I may say, greater skill, I admit, for from its large field of application it is more liable in unskilled hands to do injury. Therefore, I say, the use of the forceps depends as much upon the skill and discrimination of the operator as upon the absolute necessities of the case. Given a labor in any way prolonged, the more skilled you are in the use of the forceps, the better you know the patient, the more certain you are of the position of the child and the condition of the uterus and pelvis, the more unjustified you are in the use of instruments. And, on the contrary, if you are not skilled in its use, if its application simply means to you to stick it in, to lock it, and to pull, you had better sit down by your patients and wait until you are assured there is no other remedy. The proper use of the forceps does not seem to me to be a difficult thing to learn, if one has any mechanical turn at all or manual dexterity, and yet, I have seen it very bunglingly applied, just as I have seen such a simple thing as a hypodermatic injection badly done. Those practitioners who are content to calmly wait and wait, hour after hour, beyond the usual limit of labor, are usually lacking in diagnostic acumen and decision, and have a conscious or subconscious sense of lack of skill in all instrumental work. They wait till uterine inertia sets in, which they try to combat by old women's remedies, or worse still, by ergot; they are always loud in their denunciation of the forceps, and only see the ill effects of instruments misapplied or contraindicated.

I have heard a physician and an obstetric teacher boast of how he had advised in a certain difficult case, against the use of the forceps where other physicians in the case had wanted to use it, but that he had stood firm, assuring them that though the woman was suffering and had already been much longer in labor than the average, and that though she would probably still have several hours of suffering, he was convinced she was equal to the occasion and would eventually be safely delivered. Looking around with a proud smile, he continued, "In eight hours the baby came, and mother and child did well. And, gentlemen, there was no ruptured perineum to sew up, and no lacerated cervix with its subinvolution or endometritis and all its train of ills to keep our patient a wretched invalid."

Before a class of young students this will bring an applause, but before a body of intelligent practitioners it must create a smile. The fallacy of it all is that he takes it for granted that the cervix and perineum will be ruptured. In other words he assumes that the forceps will be improperly used. So far as the perineum goes the forceps has nothing to do with it, for they should be removed before the head is born, and as to the cervix, will any intelligent or experienced physician deny that, in an ordinary case of delayed labor, the forceps can be used without injury to mother or child?

I have given this case because it typifies a class of practitioners who cry out not only against the forceps, but against every other instrument or instrumental method, and who base their opposition upon the misuse or abuse of an instrument. It simply resolves itself into this: Could they themselves use the instrument skillfully they would see the case in a different light.

I must admit to a fairly free use of the forceps and its blessings seem to me greater every day. I have used it when I considered it absolutely necessary, and with equal satisfaction when I felt I had saved the woman an hour or more severe pain, and not only have I failed to see where it has injured either mother or child, but have been convinced it was a blessing to both.

As I have indicated, there are forceps cases and forceps cases, cases which not only demand great skill and a large expend

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ture of force, but cases where the operation becomes one of the simplest imaginable, cases requiring but little force and but a few minutes to accomplish. It is not much more than giving an enema.

To one in full obstetric practice, how common it is to get cases where the head comes safely through to the pelvic floor and there rests, the uterus apparently satisfied to have brought the labor to that point with no concern for completing it. The pains are short and inefficient, and really distress the patient as much as more efficient ones, while the pressure of the head is very distressing, and the patient becomes irritable and worn out. Forceps here applied require but the gentlest force to bring the head to the vulva outlet, and, unless the operator is a miserable bungler, it is impossible to do harm in any way. This little operation saves perhaps one, two, or three hours,and what a satisfaction to all concerned! Here is a case in point this very day of writing: A woman, healthy and strong, mother of three children, all of whom I delivered easily without any interference, is in her fourth labor. Even in her first confinement the second stage was not over an hour, while the second and third child were delivered even more easily. In this labor pains started at 2:30 A. M., and when seen by me at 10 A. M. I found the child L. O. I. Ant., the cervix fully dilated and the head well engaged and resting on the pelvic floor. Eleven o'clock passed and twelve o'clock with little or no progress; one o'clock passed, and still no progress and the pains worrying and ineffective; half-past one came and no progress and the woman tired and irritable. She had been three and a half hours in the second stage. I now give a little chloroform, apply the forceps without changing her position in bed, and with the slightest force bring the head down till it bulges the perineum; remove the blades and easily delivered the head. The child had a large head and weighed eleven pounds, which explained the delay. I was convinced in this case that I did mother and child not the slightest injury, and I probably saved her one or more hours of suffering. It is hardly a forceps case. And how many such cases come to the obstetrician, and how easily they are relieved! And how many hours of suffering in the aggregate have been saved! Surely such interference is hardly more than relieving an overloaded rectum.

I am fully aware of the dangers of meddlesome midwifery, and especially meddlesome midwifery in ignorant hands, for there is a distinction, but I believe that the ill effects of obstetrical nihilism are equally as great. We, in the South, where there is a large colored element, have abundant opportunities of seeing the results of a *laissez faire* policy as practiced by the ignorant colored midwives upon whose mercy the large majority of the colored throw themselves. My note-book is full of such cases where I have been called in after many hours and even days have gone by, death resulting to both mother and child. A case like the following seems hardly credible in this nineteenth century.

A negress, age sixteen, had been in hard labor three days, the decomposed head of a large child protruded through the vulva; the mother was dying. On traction the head came off from the body; both arms came away in removing the trunk, with the abdomen greatly distended from decomposition; the woman died a few hours later.

This, of course, is an exceptional case, but it shows to what extent this apathy may be carried, and it teaches its lesson.

Here is another case. Called to a woman after five days of hard labor, with, of course, complete uterine inertia. It took me just one-half hour to lock my forceps. I delivered a large dead child with the largest caput succedaneum I have ever seen. The mother recovered. Where but among the colored, except, perhaps, in the wilderness, could one find these results of delay and neglect.

My note-book is full of cases where I have come in after death, cases of eclampsia, a disease to which the colored are susceptible, placenta prævia, occipito posterior position, neglected shoulder presentation, and uterine fibroids obstructing labor.

I can hardly imagine the possibility of vesico-vaginal fistula from the use of the forceps, the cases which come to us now are neglected cases from the country; the more general and intelligent use of the forceps is making this condition rarer and rarer.

The cervical tear so much dwelt upon, and rightly, too, in many cases, depends upon when and how the forceps is used.

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There are cases where delivery must be rapid to save either mother or child or both, and where the cervical tear is almost nothing in comparison with the other alternative. When one can wait till the cervix is perfectly dilated, the forceps, skillfully used, tear nothing.

I am glad to quote Munde in this connection, who writes: "The forceps is an eminently conservative instrument, and can never do harm when applied and used under proper conditions, and with a correct understanding of the anatomy of the genital canal and the mechanism of parturition."

This is undoubtedly the opinion of our prominent obstetricians, if we may judge from their writings.

As I have more than once asserted in this paper, the evil results of an instrument improperly used is no argument against that instrument, it should be on the contrary an incentive to its skillful use. Physicians who have to do obstetrical work should strive to attain to that diagnostic and manipulative skill which sanctions the use of instruments. The fear of the forceps must go; only those on the outskirts are afraid of it.

The physician who knows his work, who can make his diagnosis, who understands the cervix in labor, and the limits of the uterine *vis a tergo*, and who appreciates the satisfaction of relieving useless hours of suffering, fears nothing from an instrument which has stood the test of two hundred and fifty years.

COLLES'S FRACTURE.

BY J. B. MORGAN, M. D., AUGUSTA, GA.

The diagnosis and treatment of fractures generally are of as much, or more interest to the general practitioner as they are to the surgeon. By far the greater number of all fractures are treated by the doctors in general practice. The most common and frequent one with which we have to do is that of the lower end of the radius, commonly known as Colles's fracture, its frequency making it of special interest and of great practical importance. The cause is nearly always the same—catching on the hand in the act of falling. In falling, the open hand is thrown out, and the force of the fall is received

first upon the palm. This results in hyperextension or forced dorsal flexion, which is checked by the strong mass of ligaments on the anterior side of the wrist-joint. As this extension is continued by the greater force on the hand, the ligament does not lacerate readily, but through its influence upon the lower end of the radius, this bone begins to yield on its anterior aspect, and as the force is increased, the line of fracture travels upwards and backwards until the fracture is complete. A momentary continuation of the same force will produce the usual displacement, causing the lower fragment to ride backward upon the upper, and frequently causing impaction of the firm posterior rim of the upper into the spongy substance of the lower fragment. From this explanation we would have no hesitancy in calling this a pronounced fracture by traction, and this view is generally accepted; but of late this theory has been disputed and the claim advanced that, during dorsal flexion of the hand, the upper row of carpal bones is forced against the dorsal prominence of the lower end of the radius, so that the fracture would be due to inflection rather than traction. It is immaterial to our purpose whether the fracture be the result of traction or of inflection.

Why the lower end of the ulna, as a rule, does not suffer injury, is easily understood from the anatomical arrangement of the parts, it having no direct connection with the wrist-joint itself. This fracture of the radius usually occurs about a half to one inch above the articular surface, and is generally transverse. The line of fracture varies within certain limits, but the manner of reposition is practically the same. The diagnosis of Colles's fracture is not difficult. The history of the accident, the characteristic deformity, and pain at the seat of the lesion, point you at once to the character of the fracture. A great deal has been said and written about the diagnosis of this typical fracture; but two points only are necessary to observe, in order to arrive at a correct diagnosis. The marked displacement of the whole hand toward the radial side of the wrist, and the relative position of the styloid processes of the ulna and radius. In the natural condition of the parts with the arm hanging by the side, the styloid process of the radius is on a lower level than that of the ulna; that is to say, nearer the ground. After fracture, this process

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is on the same or higher level than that of the ulna. The prognosis of the fracture depends in the main upon the treatment. Colles's fracture always produces deformity—the degree of deformity turns upon the amount of displacement of the broken fragments. A misinterpretation or diagnosis, or if rightly diagnosticated, neglected or improper treatment, will leave permanent this deformity. The first requirement in the treatment is to effect exact reposition. And I wish to emphasize most strongly, that this cannot be done by traction. Those of us who were taught, and have faithfully practiced this method, know how impossible it is. The vast number of permanent deformities from this injury is an unanswerable argument against its use. We can readily understand why traction is inefficient, when we consider for a moment the anatomical arrangements of the parts. In the first place, there is no muscle attached to the hand anywhere, that is attached to the radius below the line of fracture; therefore, in making traction at the hand, there are no muscular attachments by which the broken lower end of the radius can be pulled down into position. This being the case, the only thing that traction could accomplish, by the intervention of muscular attachment, would be to pull the upper and longer fragment of the radius into further displacement or firmer impaction, but the main reason why traction can not effect reposition of the fractured fragments, is on account of the action of the anterior and posterior annular ligaments during extension. These ligaments are continuous with, and may be regarded as thickened portions of the deep fascia of the forearm. They are strong, fibrous bands, arching over the front and back of the wrist-joint, firmly attached to the carpal bones below, and continuous with the deep fascia of the forearm above. The flexor and extensor tendons of the hand pass through and under these ligaments, in close contact with the lower end of the radius, this part of the bone being grooved for their reception. The effect of traction, therefore, would be to lengthen the longitudinal fibres of the deep fascia and annular ligaments at the expense of the transverse fibres. This would cause the ligaments around the wrist-joint to more closely bind the broken ends of the bone, and, more than this, the tendons which pass through and

under the annular ligaments are also drawn strongly against the fractured bone, so that we would have a closely applied splint of tendons, held firmly in place by strong, flexible ligaments—making replacement by traction impossible. For the greater the extension the more closely will the tendons and ligaments hug the bone, and the more firmly the fragments become fixed in their displaced position. But while traction will not accomplish it, every case of Colles's fracture can be readily reduced by strong, forced dorsal flexion. This is best done under an anæsthetic, to avoid pain and produce complete relaxation of the tendons and ligaments about the wrist. It may require several attempts before exact reposition can b obtained, but with a little patience and care it can always be done. The best way to do this is with the patient's hand in pronation, you grasp his forearm with one hand, in such a way that while the radius is firmly held, your thumb rests just above the line of fracture. With the other hand, you grasp the hand of the patient, so that your thumb presses firmly upon the back of the lower fragment. The hand is now carried strongly back towards the dorsal aspect of the radius in forced and extreme dorsal flexion, until you feel by palpation that the lower fragment has become unlocked, and can be pushed into place by your thumbs, while at the same time, the patient's hand, under strong extension, is carried into the normal position. If this manœuvre is properly done, and the fragments accurately replaced, almost any kind of a dressing which keeps the fragments at rest, will give a good result. The peculiar character of of the displacement in this fracture and the constant difficulty experienced in obviating deformity, have greatly stimulated inventive ingenuity, and resulted in a number of specially devised splints. We have the Gordon splint, the Coover splint, the Levis splint, the Hamilton splint, the Nelaton splint, the Bond splint, the Hays splint, and a great number of others. I have neither the time nor inclination to discuss the merits and demerits of these various splints. All of them are more or less faulty; none of them perfect. Most of these splints were devised upon the assumption that, by bearing the hand strongly to the ulna side, the fragments of the radius are brought more exactly into apposition, and more easily and effectually retained—a supposition that takes for

granted two things; first, that there exists an overlapping of the fragments, either through the whole extent of their broken surfaces or especially towards the radial side, or, that the upper end of the lower fragment is inclined to fall against the ulna, or that all of these several conditions coexist; and, second ly, that if such displacements do exist they can be remedied by fixing the hand in strong ulna flexion. The answer to the first supposition is, that Robert Smith and others, who have made a particularly careful examination of all the specimens they could find, in the various pathological collections, tell us that none of these displacements have been found to exist; but that the displacement is backwards and somewhat upwards; so that in bones in which unreduced fractures of this kind have consolidated, the posterior surface is found to be considerably shortened, while the anterior retains its normal length, and, secondly, in order that this position may prove effective, there must be some point upon which to act as a fulcrum. It is of no use that we rotate the hand for the purpose of making extension unless there can be found a resistance or fulcrum upon which the rotary motion may be performed. It is not in the ulna certainly, for that bone has no point of contact with the carpal bone. When the lower end of the radius is broken and the ligaments of the joint more or less torn, the ulna, although thrust downwards much farther perhaps, than it could ever descend in its normal state, still fails to find a support, and spreading wider and wider from the radius as it is thrust farther upon the hand, no limit can be given to its progress, except the capacity of the joint to admit of motion in this direction; and, further, this position is unnatural and exceedingly painful. In the normal hand this position when forced, can not be endured beyond a few seconds and the pain must be infinitely worse, in this position, when the ligaments are torn, the bone broken and the wrist inflamed and tender; and if persisted in, will have the effect of greatly increasing the inflammation and leaving, in nearly every instance, an unsightly, crooked and permanently stiff wrist, to the great inconvenience of the patient and annoyance of the doctor. It only remains for us to determine the form of splint which ought to be preferred, and to describe its mode of application. The best temporary and, in most cases, the best permanent dressing is

Wyeth's modification of Pilcher's. It is simple and highly satisfactory, and is applied as follows: Roll two pieces of a bandage, two inches and a half wide, into a compress about as thick as the little finger. After reduction is complete and the hand brought back into the straight position, place one compress along the inner aspect of the ulna, extending from the anterior margin of the carpus upward, the other exactly parallel with this, along the outer border of the radius, over the styloid process. While these are held firmly in position, secure them by strips of adhesive plaster, one inch in width, wound securely around the wrist and arm, from the upper end of the compresses to the lower end. The hand and arm should be carried in a sling, and the dressing worn for two or three weeks. This dressing is neat, and while holding the fragments accurately and firmly in apposition, has the additional advantage of allowing the freest possible mobility of the wrist and fingers, thereby greatly lessening the probability of temporary or permanent stiffness.

The plaster of paris dressing is a most excellent one, and is to be preferred in old people where there is firm impaction which you do not care to break up, or in cases where the fragments are more or less comminuted. It should be applied, from the lower border of the metacarpus to the middle third of the forearm—with the patient's hand in the straight position. A straight dorsal splint may also be employed, but it is not as desirable as the plaster of paris. Under no circumstances use the angular, crooked or pistol shaped splint, and no form of splint should be allowed to project beyond the metacarpus. The fingers must remain freely moveable, to prevent stiffness of the joint. Motion should be encouraged; at first, limited and careful, later, active and free. In aged patients, where you have more or less firm impaction of the broken ends, reduction should not be attempted, as it is better to have a crooked, deformed wrist, than a failure in bony union, and impaction favors the consolidation of the fractured bone.

ELECTRICITY IN THE FUNCTIONAL NEUROSES.

BY A. D. ROCKWELL, M. D., OF NEW YORK.

Functional diseases of the nervous system, and indeed all functional derangements, are of far greater importance in the consideration of methods of relief than diseases that are organic or structural. Much has been written about progressive degeneration of nerve tissue, but we still find and, in all probability will ever find, that all our therapeutics avail but little in dealing with gross central or peripheral nerve lesions. A man suffering from a grave organic lesion is very much in the condition of him who is in a state of senility. The house is falling to pieces, the landlord refuses to make further repairs, and unassisted by nature, medical art is practically powerless. With what, however, in our ignorance we term functional diseases, the case is widely different. Nature here does not withhold her aid, and supplemented by the resources of science, the most destroying and persistent functional diseases are successfully dealt with. Of all the forms of the unctional neuroses, neurasthenia is perhaps the most important. Not alone because of its frequency and the suffering it entails, but because the results of the treatment are so much more satisfactory, than in many of the diseases belonging to this class. The following case illustrates both the results of treatment and the difficulty in differentiating sometimes in the selection of the proper form of current.

Mr. E., aged twenty-nine, stated that to the age of twenty-six, he had been to an unusual degree exempt from every form of mental and physical ailment, and his present condition he attributed in part to the influences of heredity, and in part and for the most part, to indiscretions in diet, late hours and sexual excesses. He could still endure physical fatigue, and could at times concentrate his mind, and reason clearly and with forec, but during most of his waking hours, his life was rendered miserable by two symptoms so common among neurasthenics, namely, hopelessness and morbid fears. His mental depression was profound, and by no argument could he be induced to believe there was any hope for him.

A sort of mild panaphobia (fear of everything) existed like a steady undercurrent greatly adding to his distress, although

the most prominent feature of his case was a fear of meeting anybody, man or woman, for the first time, and a fear of doing anything that he was told to do or that he thought he ought to do.

This fear so possessed him that it was six months after he had decided to consult me before he came into my presence, although he had come to the door a number of times, going away without ringing the bell, and on one occasion actually entered the waiting-room, taking his leave, however, in great trepidation after sitting a few moments. Symptoms of a less noticeable character were an atonic voice, with occasional disturbances of the functions of the nerves of special sense. I relate this case not only because it illnstrates how well some neurasthenic conditions react to treatment, but also the peculiarity of idiosyncrasy. The faradic current irritated him, whether given locally or generally. Static electricity, which is so grateful in many cases, was even worse in its effects, but from the moment the galvanic current was applied he began to improve. He was remarkably tolerant to the current. Applied by the method of central galvanization with a broad electrode to the head, he bore without discomfort as high as forty milliamperes, while with the electrode at the neck (cilio-spinal centre) seventy-five milliamperes were given.

Under this method of treatment continued for two months the improvement was very great. A moderate degree of cheerfulness took the place of despondency, his morbid fears in great measure disappeared, and he again resumed his work with resolution and hope.

It is this susceptibility or peculiarity of constitution that renders it so difficult in many instances to differentiate between the various manifestations of electricity in any given case. Even after long experience in its use one too frequently finds that the question as to the selection of the proper current can only be determined by a few tentative applications. While this difficulty of differentiation is quite real, and is often the occasion of delay in obtaining results, it must not be supposed that there are not a number of definite indicatious that materially aid in the selection of the proper form of current in the treatment of the functional neuroses.

Take for example the question of pain.

Pain, as the result of an acute inflammatory process, contra-indicates for the most part the use of electricity. This renders it of positive diagnostic value. In cases of severe uterine abdominal pain, the introduction into the vagina of a bi-polar electrode, and the application of a high tension faradic current will increase the pain if it be due to acute congestion, but if the pain be of a hysterical or pseudo-neuralgic character the relief is immediate. In this condition, uni-polar methods of application—by which is meant one pole internally and the other externally—are inefficient. The action of the external electrode on the voluntary muscles induces contractions that are unbearable, while the high resistance of the skin interferes to some extent with its efficient action. Both poles acting, however, through the low resistance of the mucous membrane, and on the comparatively insensitive tissues of the vagina and uterus, makes it possible to utilize a current strength of great power, without the slightest pain or violence of contraction.

The effects of pressure are exceedingly useful in enabling one to select the proper current for the relief of many superficial and even deeply-seated pains. When the pain is increased by pressure, it will be found almost invariably that if electricity is of any service, it will be through the use of the galvanic current.

If on the contrary, firm and equal pressure affords relief, as it so frequently does, the faradic current is, as a rule, far more efficacious than the galvanic. It is in such conditions that the sinusoidal and high tension induction currents are of such value. All this is equivalent to saying that in true neuralgia the galvanic current is indicated, while in false or pseudo neuralgias—which are simply forms of pain, occupying certain areas and running seemingly in the direction of certain nerves—the faradic or the sinusoidal currents are the more useful.

Selections and Abstracts.

ENURESIS AND ITS TREATMENT.

One of the best articles on this subject that have recently appeared is that by Dr. M. Mendelsohn in the *Berliner Klinische Wochenschrift*, November 25 and December 9, 1895.

Enuresis means simply an involuntary discharge of the urine; hence every form of involuntary urination is enuresis. According to Foster's "Encyclopædic Medical Dictionary," we have:

Enuresis atonica—Enuresis from debility.
E. continua—Incontinence of urine both day and night.
E. diurna—Incontinence of urine by day.
E. irritata—Enuresis from irritability.
E. mechanica—Enuresis from mechanical causes.
E. nocturna—Nocturnal enuresis.
E. paralytica—E. associated with paralysis of bladder.
E. spastica—E. due to spasm of bladder.

Thus we have a term which may be applied to very different conditions. There is a wide difference between the condition represented in a child, with a bladder possessing a strong detrusor and a relatively weak sphincter vesicæ, who is unfortunate enough to suffer from enuresis nocturna, and that represented by the paralytic form whose bladder, incapable of being emptied voluntarily, the urine dribbles from overflow. And yet the term may be applied to either condition. In general, however, by enuresis we understand the condition found most frequently in children where there is nocturnal incontinence or, also, diurnal incontinence of urine, due essentially to a functional disturbance. The term incontinence is more apt to be applied to conditions in which there is a mechanical defect, and, according to Mendelsohn, we speak of "true incontinence" if the condition is due to defect of the sphincter, and of "false or paradoxical incontinence" where the palsied bladder-wall is at fault. In the former the bladder may be found to be always empty; in the latter, always full.

The purely functional condition where the urine and urinary apparatus are normal, which finds expression in nocturnal

enuresis, is essentially a disease of childhood, and ordinarily ceases with the establishment of puberty. Out of thirty-two patients with this trouble Mendelsohn found only three were above the age of 14 years, and of these none had reached the age of 20. The greater number of cases were in males. The trouble may begin in the earliest years of life; that is, the child never learns to hold the urine, while ordinarily, by the time the teething process is over, children have learned to retain the urine for a sufficient interval. On the other hand, the trouble may begin in the later years of childhood, especially in children weakened by an attack of illness.

Mendelsohn thinks that too many theories have been constructed to explain this phenomenon; though there may be individual cases in which an underlying cause may be found, he believes that the phenomenon in the great majority of cases admits of a simple explanation. In many children the vesical sphincter is not sufficiently developed to be able, without the aid of the impulse of the will, to withstand the impulse communicated by the detrusor which has been stimulated to action, by the reflex, from the entrance of urine into the bladder-neck. This weakness passes off with the development of the prostate and the additional aid given by this organ in its intimate connection with the internal sphincter; and while in children the impulse to urinate comes at a certain distension of the bladder, by the entrance of urine into the bladder-neck —thus setting free a reflex stimulus of the detrusor muscle, the contraction of which and the consequent spontaneous emptying of the bladder may be successfully combatted during waking hours by the aid of the will and of the accessory cut-off muscle until a favorable opportunity—this sphincter in sleep may be unable alone to offer sufficient opposition. Thus children, who day after day are accustomed to urinate at relatively short intervals and at the first warning impulse, in the course of the disproportionately long sleep, are not apt to have that control which comes with practice during waking hours of holding the urine after an impulse coming from the reflex contraction of the detrusor has taken place. This combatting of the impulse of the contracting detrusor forms a closed circle; thus the bladder is distended to a certain point and urine enters the vesical neck. This gives the impulse to

the detrusor, which on contracting throws more urine into the vesical neck, causing a reflex contraction of the sphincter, which overcomes the impulse from the detrusor.

There are two periods of the night at which the involuntary act is apt to take place—in the early portion of the night, during deep sleep, and the child does not wake at the accident; or at a later period, near dawn, when a longer time has elapsed. At this time, though sleep is less profound, the warning of a full bladder is apt to cause dreams, in which the child is aware of the desire to urinate, and, while dreaming that he has risen, or that the opportunity is present, relaxes the sphincter, and is then apt to awaken only to find a copious discharge of urine in the bed. Some children may further urinate involuntarily twice during the night—first, at the earlier period, during the profound sleep, and then later, toward dawn. The shame which an older child would naturally feel, and the scorn and derision in which he is held, the treatment to which he is often apt to be subjected, only result in making him timid and in aggravating the difficulty. The condition may go on further, so that even during the day enuresis may occur.

For treatment Mendelsohn advises three essential plans:

1. Regulation of the amount of fluid that the child is to take and the time for taking. In severe cases no fluid is to be allowed after noontime; the supper should be plain and nourishing. Sometimes idiosyncrasies may be found in the matter of the kind of fluids which aggravate the trouble, but fluids containing alcohol and carbonic acid are essentially bad and should be prohibited. The child should be instructed in the regular performance of micturition at stated and regular intervals, and all other habits, hours for meals, and time of going to stool, should in like manner be regulated. In milder cases this is sufficient.

2. A further and very important aid is to raise the foot of the bed so that it stands considerably higher than the head. In this way the urine as it flows from the ureters occupies the posterior portion of the bladder, and gravitates toward the fundus, and is thus longer in entering the vesical neck. For this plan he claims excellent results, the enuresis quickly ceasing in many cases. He advises a continuance of this position

for 8 to 14 days after cessation of the condition, and a gradual lowering of the bed to the horizontal, taking 8 to 14 days in its performance. A return to this method may again be necessary.

3. For medicine he recommends the tincture of rhus aromatica, 15-drop doses at noon, evening, and bedtime, and believes its efficiency consists in allaying the sensitiveness of the bladder-neck.

As additional treatment the faradic current in very weak dosage, applied to the bladder-neck, beginning with a current that can scarcely be perceived, and at no time so strong as to cause discomfort, he looks upon as a valuable adjunct.

Mendelsohn mentions the treatment by belladonna in increasing dosage, as laid down by Trousseau, and for some cases finds chloral hydrate of use.

All mechanical methods which have been recommended—as a knotted towel in the middle of the patient's back to keep him on the side; pressure to perineum, to penis; closing the prepuce by collodion, etc.—he characterizes as cruel and as having a bad effect upon the child's mental condition. He also condemns nitrate of silver to the deep urethra, but believes small soft Nelaton catheters to be useful in some cases The child should be guarded against petty tyranny and teasing. The general health should be supervised; fresh air, change of air, exercise, cold bathing, etc., may be found to be necessary. —*American Medico-Surgical Bulletin.*

A CASE OF GUNSHOT WOUND OF THE STOMACH WITH THREE PERFORATIONS OF SAME.

BY DR. L. A. WOODSON, M. D., PALTON, ALA.

I suppose that in no department of medical science have more beneficent and salutary advances been made than that of surgery, and these advances, reckoning them from their present state of almost perfection, date back but a little more than a decade. In the retrospection of a varied experience of some thirty-five years in the practice of medicine, four years of which were passed as surgeon in the Confederate Army, I fail to recall a single case of multiple perforations of the stomach or bowels, which did not have a fatal

termination, until up to some ten or fifteen years ago. I have no doubt that there were some cases of the kind that did recover, but they were rare exceptions to the general rule; and the patient might be said to have struggled through the shadow of death into life, unaided except by the *vis medicatrix naturae*, in so far as any systematic and scientific plan of procedure was followed in his treatment. But at the present time no wound of the character indicated needs, it seems, to be regarded as necessarily fatal.

The observations above made were suggested by a case which occurred in my practice a few weeks since, and one which I consider of sufficient interest to place upon record.

On the 18th of March last I was summoned at midnight to attend a negro man about 25 years of age, who, the messenger informed me, had been desperately wounded by a pistol shot inflicted by another negro with whom he was engaged in a fight. On arriving at the home of the patient I found him suffering acutely from the effects of the wound. The ball from a 38-calibre Smith & Wesson pistol had entered the left side just below the apex of the heart, and the probe, influenced by the gentlest manipulation, clearly indicated that the ball had penetrated the cavity. The track of the ball trended slightly downward, and, the course, from left to right. The man was suffering greatly from shock, the pulse being 120, very weak and unsteady. I also found that he had vomited a considerable quantity of blood, which his friends informed me was almost black in color. From this latter symptom and the direction of the track of the ball, I felt satisfied that the stomach had been perforated. The lateness of the hour, the imperfect light, and my unwillingness to proceed unaided in a case of such gravity, determined me to postpone surgical interference until the following day, and convinced by considerable experience in cases of kindred character, that such interference gave promise of the only rational hope for his recovery. I therefore gave the man a half a grain of sulphate of morphine to relieve pain and tranquillize his nervous system, and left him for the night. The next day I sent for my son, Dr. J. L. Woodson, to perform the operation. He did not arrive until 4 o'clock P. M. The patient at this time was in a most critical condition, and so

enormously swollen over the whole abdominal region from internal hemorrhage as to tilt upward at an angle of about forty-five degrees the ensiform appendage and costal cartilages. Blood was oozing from the external wound, and the man complained of considerable difficulty of breathing, due both to hemorrhage and upward pressure of the blood against the diaphragm. His pulse was very weak, and 125 to the minute. In addition to all this, he had at intervals during the morning vomited considerable quantities of blood mixed with fæcal matter. Finding the man in such a desperate condition, my son hesitated as to the expediency of performing so grave an operation as laparotomy, fearing lest the man should die before its completion. But feeling absolutely certain that without such an operation he could not survive many hours, he decided to perform it, though entertaining but little hope of any permanent benefit resulting.

Having determined upon this course of procedure we laid him upon the table, scrubbed well with soap and water the whole anterior surface of the abdomen, and after wiping him quite dry repeated the process with a solution of bichloride of mercury. We then gave him about three ounces of whisky, which he retained. As we judged that considerable time would be consumed in the operation we decided upon ether as the anæsthetic. In about seven or eight minutes from the commencement of its administration he was thoroughly under its influence. My son, having selected the knife to be used from a dish containing all of the instruments to be employed in the operation, immersed in a hot solution of the bichloride, made the primary incision, extending from the ensiform appendage to the umbilicus. When the incision had been carried to the requisite depth, a grooved director was entered at its lower extremity and the peritoneal cavity opened up to the sternum. No sooner had this been done than , under the powerful pressure exerted by the effused blood which filled the cavity, both the stomach and intestines were forced through the opening, the latter were protected from chills and injury by envelopment in towels, saturated with warm salt water. Bent spatulæ were then applied to the lips of the wound, and under steady traction it was so widened as to allow the stomach to be lifted as high through

the opening as its internal attachments would with safety permit.

The first discovery made upon examination was that the ball had entered its cavity at the cardiac end, and in so doing had severed the gastro-epiploica sinistra artery. This artery was bleeding quite freely, and was at once secured by the finest carbolized silk ligature. The gut ligature would have been used, but we did not possess it at the time. The wound in the stomach was then sewed up with the same kind of ligature, employing for the closure of this wound the Lembert suture. The stomach was now turned as far over to the left side as possible in order to inspect its under surface. When this was done we found that the ball had emerged to the right of the esophageal opening, and then making another perforating wound an inch long in the pyloric end of the same. These wounds were also closed in the same manner as the first. The ultimate destination of the ball is a matter of conjecture, as the condition of the patient and the length of time already consumed in the operation forbade the idea of further exploration, but the direction of its course, together with the large quantities of bile ejected during the night preceding the operation, would indicate that its final lodgment was in the liver.

Having now done all for the man that a prudent regard for his safety seemed to warrant, we turned him upon his side in order to allow as much of the effused blood as would do so to escape, since the quantity contained in the cavity rendered its absorption by sponges both difficult and tedious. For the thorough removal of that which remained the sponges were used, and the peritoneal cavity flushed with warm water holding in solution the bichloride of mecrury, 1 to 3,000. This being done, the stomach and bowels were carefully replaced, the drainage tubes adjusted, the corresponding surfaces of the wound accurately approximated and secured by deep-seated sutures of carbolized silk; iodoform was freely dusted over the entire length of the wound, strong adhesive strips, two inches in width and thirteen inches in length, were applied transversely across the line of incision to relieve undue tension upon the stitches; antiseptic gauze was laid over these strips, then a layer of absorbent cotton and a wide

rubber bandage encircling the body from the sternum to a little below the umbilicus completed the dressing.

The time consumed in the operation, including the dressing, was forty minutes. After having been aroused to consciousness, we gave him a hypodermic injection of strychnia, and cautioned his nurses to allow no food or drink to be taken into the stomach, but to be given by injection into the rectum.

On visiting him the next morning, I was astonished to find him entirely free of fever, his temperature was only 98½ degrees and his pulse 85, and at no time thereafter did either attain a higher elevation. His food up to the 26th of March, eight days after the operation, as well as all the drinks allowed, were injected into the rectum. Five days after the operation a dose of sulphate of magnesia was given, and three copious discharges followed its administration. The dressings were all removed on the eighth day, showing the wound nearly healed through its entire length, by first intention. Several of the stitches were removed at this time; the drainage tube had already been removed on the third day. Satisfied as to the condition of the wound the various dressings were reapplied as in the first instance, and the wound was examined again on the 30th of March. This inspection showed the wound entirely healed. All of the stitches were removed, and no other dressing than the roller bandage applied, and that only for the purpose of support.

On May the 8th he was discharged cured, and at this time he seems to be in as perfect health as before the serious injury sustained. Food and drink by the mouth were permitted on the eighth day after the operation, the food consisting of soup, milk, and other bland substances imposing little or no tax upon the digestive functions of the stomach.

The points of primary interest attaching to this case are the rapidity of healing and the completeness of the cure, the absolute absence of fever after the operation was performed, notwithstanding the gravity and extent of that operation, and finally that an artery of the size of the one severed, should have remained unsecured for sixteen hours, and not have resulted in death from hemorrhage. I infer that the reason this did not result in death must have been due to the great pressure exerted by the effused blood, occasioning by this pressure almost entire occlusion of its lumen.—*Nashville Journal of Medicine and Surgery.*

VIRULENCE OF THE SEMINAL FLUID IN SECONDARY SYPHILIS.

Notwithstanding all the study which has been given to syphilis, facts present themselves from time to time which contradict the usual experience, and which are difficult of explanation. As regards certain points there has been, and is, much diversity of opinion. It is generally held that the physiological secretions of syphilitic subjects do not transmit the disease unless contaminated by mixture with products of syphilitic lesions. It is doubtful, however, whether this should be acknowledged as a universal rule. As having a bearing upon some of these debatable questions, we have read with interest the report of two remarkable cases by Dr. Rochon. Toward the close of 1893 this writer had occasion to observe a young married woman, 24 years of age, who presented a large chancre upon the abdominal wall, in the median line and about four finger-breadths below the umbilicus. The sore was nearly as large as a two-franc piece and had begun fifteen days previously upon the site of a slight abrasion of the skin, where it had been pinched by the corset. At the date of examination its aspect was typically that of a chancre.

The husband, 29 years of age, confessed that he had syphilis for two years. He had, on that account, delayed his marriage as long as he could without exciting family difficulties, and, at all events, until several months had elapsed without any syphilitic manifestation. Since marriage, although he had examined himself scrupulously and without cessation, he had never detected any sign which seemed to him in the slightest degree suspicious. He had been under careful treatment for eighteen months, but, on account of disordered stomach had avoided all medication for the preceding six months. Fearful of having a syphilitic child, he had been in the habit of ejaculating upon the abdomen of his wife, to whom he made the excuse that her health was too delicate to allow pregnancy.

Rigid inspection by Dr. Rochon failed to reveal any evidence of syphilis upon the skin or mucous membranes. Three weeks after she was first seen the woman exhibited a gen-

eralized papular eruption confirmatory of the diagnosis. The chancre was in process of cicatrization. At the end of a month the manifestations had disappeared and the writer lost sight of the patient.

The writer was unable to explain the case without admitting the inoculability of the semen, although he was able to find in medical literature only negative instances regarding that mode of contagion. Nevertheless, he remained in doubt until he encountered another case which seemed to throw light upon the subject.

In November, 1895, a young man, aged 26 years, syphilitic for fourteen months, and who also suffered from blenorrhagia, came under his care. No signs of syphilis were present at the time. The urethral discharge had ceased, except that pressure along the urethra from behind forward in the morning and before micturition forced out a drop of colorless, transparent and slightly viscid fluid. This fluid contained no gonococci. He was permitted to indulge in sexual congress. Five weeks later he returned, bringing with him his mistress, who complained of excoriations upon the vulva. The reporter was not a little surprised to find an indurated chancre of the fourchette without any trace of blenorrhagia. The woman most positively asserted that she had had relations with no other man for three months. The man had no sore upon the penis or within the mouth, but the slight urethral discharge continued. Both man and woman were subjected to specific treatment. In little more than a month the urethral discharge had much diminished and the chancre was in course of cure. In due time a disseminated papular rash came out upon the body and some mucous patches developed in the mouth. In this case the source of infection was conjectured by the author to be mucous patches in the urethra, excited by the gonorrhœal inflammation and persisting after the cure of the latter. The theory seemed to be supported by the disappearance of the discharge after the employment of specific remedies. No alteration of the epididymis, testicle or prostate was detected. This second case led the reporter to believe that the chancre of the abdomen had been produced in a similar manner by contamination of the semen through the ducts. This would be to admit the

possibility of secondary syphilitic manifestations of the ejaculatory ducts. As at the present time we are aware that in this stage the liver, intestine, kidney, pleura, lung, etc., may be attacked, it does not seem difficult to suppose that the mucous membrane of the internal genital passages may likewise be involved. These parts are known to be frequently diseased during the tertiary period. Furthermore, a secondary epididymitis is described among what may be termed the classical manifestations of the malady. This lesion develops most often in the head of the epididymis, rarely in the tail. The tumor is indolent, not prone to the complications of tertiary syphilis, and subsides without leaving any trace. It may appear from the third month to the third year after infection. At a later time it appears as a tertiary syphiloma, rarely independent of sarcocele. An important consideration is that syphilitic epididymitis does not seem to destroy the permeability of the canal. The pathological anatomy has not been demonstrated, but is probably identical with that of other lesions of the same period. Syphilitic lesions of the spermatic ducts in other situations are underscribed, but they may nevertheless exist, as their painlessness and location would readily permit them to escape notice. It may follow from the foregoing train of reasoning that even if the semen be not infectious in itself, as has been demonstrated, it may acquire virulence in traversing a syphilitic epididymis, a urethra affected with mucous patches or other lesion possibly non-syphilitic in itself, but which allows a mixture of blood to take place during ejaculation. Such facts have an obvious bearing upon the doctrine of "syphilis by conception."—*Medical Bulletin.*

TWO BICYCLE DANGERS.

Anything further about the bicycle may seem superfluous. Its hygienic advantages and dangers have been so largely considered the world over that little remains for the present to be said. But with the beginning of a new season it may not be amiss to call attention to two dangers attendant upon the use of the wheel.

Of these, one applies to men chiefly, and consists in the possibility of improperly adjusted saddles, causing an irritation

of the perineum. The occasional occurrence of such irritation is unquestionable, and its results concern the posterior urethra rather that the prostrate. Although much is said in speculation of the future "bicycle prostate," that organ is well protected by surrounding tissues, and lies too deep in the pelvis to be seriously influenced by the pressure and resulting congestion from the saddle. It is yet too early to affirm that the increase in bicycle riders will not be accompanied by an increase in the number of hypertrophied prostates; from anatomical grounds, however, such a danger appears slight. It is more probable that any perineal difficulty resulting from bicycle riding will show itself in and around the membranous urethra. It is needless to add that urethræ which have sheltered the gonococcus in their folds are the most liable to become inflamed and the seats of abscesses. Badly fitting saddles have already caused many cases of periurethral abscesses. To avert the extreme pressure on the perineum, and to throw most of the weight on the tubera ischiorum, several "anatomical saddles" have been invented. The principle is the same in all; and although these saddles are less comfortable than the old-fashioned ones, their hygienic superiority is unquestionable. Much the same mechanical advantage may be obtained by tilting forward the ordinary saddle, so that its front part is in a considerably lower plane than the posterior part; the body-weight will then bear chiefly on the ischial tuberosities, and the perineum will touch the saddle but little.

The second danger applies equally to men and women, and has reference to overaction and possible hypertrophy of the heart. If any one stops to count his heart-beats, after even only a moderately brisk spin, it will be found that they are decidedly accelerated, and that the cardiac overaction lasts for a considerable length of time. The amount and duration of the tachycardia will vary, naturally, with the individual, and in the same individual at different times. But the heart should have resumed its normal rate at the end of fifteen or twenty minutes, and if it does not do so it may be inferred that it has more work to do than it can conveniently handle. Accordingly, the bicycle rider, whether man or woman, will only err on the side of safety by noting how much the heart can with safety stand, and will regulate his speed and distance accordingly.—*Am. Med.-Surg. Bulletin.*

CHRONIC GASTRITIS OF LONG STANDING, WITH PERIODIC ATTACKS OF MIGRAINE. REPORT OF A CASE.*

BY GEO. A. CURRIDEN, M. D., OF CHAMBERSBURG, PA.

The herewith reported case is one of double interest, inasmuch as the patient has been under my care for a number of years, and previous to the commencement of the present treatment, I have been unsuccessful in affording much relief or preventing the recurrence of the frequent and periodic attacks of migraine, to which she had been more or less subject since early womanhood, the cause of which I could not account for more than "a habit long continued," aggravated by gastric catarrh.

The history of the case is briefly as follows: Mrs. A., age 55, since early womanhood has been subject to periodic attacks of migraine at intervals of two, three or four weeks, but seldom free from them for longer intervals.

An attack comes on by general malaise of usually a day's duration, repugnance of food or drink, marked drowsiness, much depression, with request for rest and quiet, followed by complete physicial prostration, dull frontal headache, which the least noise or disturbance makes the more intense, invariably accompanied by violent and frequent attacks of vomiting and retching, inability to retain any food or nourishment of any kind, retention of bowels, often cold sweats, pulse somewhat slow and weak and small in volume. This condition lasting usually two days, followed by gradual cessation of symptoms.

During the whole period of usually four or five days duration, she is unable to take nourishment of any kind, remains constantly in bed, and desires only complete rest and quiet. The previous treatment has been so varied and on so many different plans, that I refrain from mentioning them.

Two years ago I was able to prevent an attack for over two months by the use of strychnine in 1–20 grain doses t. i. d. with careful diet and artificial digestive.

In May, 1895, I put her on Charles Marchand's "glycozone" in teaspoonful doses well diluted t. i. d., using this, as all other previous remedies, experimentally; she commenced to

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improve much in general health, an unusually good appetite, without the previous distressing symptoms following, a more regular movement of the bowels, freedom from headache, and in every way a decided improvement; this improvement and enjoyment of good health lasted during continuation of above treatment for over three months. Unknown to me she stopped taking the glycozone, thinking herself perfectly well. In a few weeks she had a return attack, milder and devoid of gastric distress. A similar attack two months later, both of which occurred some weeks after stopping the above described treatment, and I might say caused by imprudence in diet.

The conclusion come to in this case is that the headache is sympathetic, that the stomach becomes acutely inflamed by its inability to naturally and properly perform its functions, and responds to the call of nature to unload itself, and thus secure for a time rest, that the use of glycozone has corrected the existing gastritis and by so doing has removed the primary cause of these many years of suffering.

Society Reports.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Regular Meeting, May 26, 1896.

DR. J. N. UPSHUR, First Vice-President, in the Chair.

The special order for the evening was the discussion of

BOVINE TUBERCULOSIS: ITS RELATION TO PUBLIC HEALTH.

BY WM. S. GORDON, M. D., RICHMOND, VA.,

Professor of Physiology, University College of Medicine.

In laying this subject before you for consideration, I have divided it for clearness and convenience into seven heads.

FIRST.—*Do cows, etc., have tuberculosis?*

There can be no doubt of this in the mind of any person who has attended a post mortem. The question need not be discussed from a local point of view, but from a world-wide one; but being answered so emphatically in the affirmative, it would be hardly worth while to go into it.

SECOND.—*Is it transmitted to animals?*

Sooner or later animals which are injected with the juice of infected meat have the disease. In only one instance, has an observer reported that he was unable to produce the disease by injection. An Italian experimenter states it cannot be communicated to birds. Sheep and goats, particularly the latter, show well-marked tubercles.

I quote the rules and regulations of the Copenhagen Milk Supply Co. to show how it sought to prevent transmission. Reports show cases of congenital tuberculosis in calves; but if a calf of a tuberculous cow be fed with uninfected milk it may be reared in a healthy condition.

Serum of a tubercular human injected into a guinea-pig, has produced tuberculosis.

THIRD.—*Can it be detected?*

It is not absolutely determined that tuberculin is an infallible diagnostic agent, but the Massachusetts State Board of Health says that in connection with physical signs, it never

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fails to diagnose; that implicit confidence may be placed in it, and that the reaction is not always in proportion to the stage of disease. A French observer states that inoculation is the one method capable of giving results free from ambiguity. It is a well known fact that at times patients may be dying of phthisis and yet the sputum does not reveal it.

To show the value of tuberculin, statistics prove that out of fifty-three animals injected, forty-one gave the reaction, and of these, thirty-eight proved to be well-marked cases. Many other instances may be quoted with like results; and taking all things into consideration, we see that tuberculin diagnoses almost infallibly.

FOURTH.—*How are herds infected?*

Dr. Harbough states that intestinal tuberculosis is more dangerous than that of the glands or lungs. The animal has diarrhœa, the discharge dries, mixes with dust, is stirred up, breathed, and taken in with the food. He claims this is the common method of infection.

FIFTH.—*Are tubercle bacilli found in the spermatic fluid and milk?*

Referring to the human being, reports are somewhat contradictory, but it is a fact that seminal fluid may transmit the disease even when there is no lesion of the urinary tract. The bacilli are not always found in milk, but, by means of the centrifuge, they have been demonstrated. Ashmead has shown that killing of the tuberculous animals, and keeping children from their milk, has increased the longevity of life, and caused a decrease of tuberculosis.

It is claimed that milk is not only dangerous because of bacilli in it, but, also, because of toxins generated by them. Armstrong holds that milk is more apt to infect than meat. Brush says the chronic forms of tuberculosis are not easily recognized, and that the necessity for more practical knowledge is evident. Euleris thinks it significant that a coincidence exists between tuberculous milk and meat and human phthisis.

SIXTH.—*Do animals infect human beings through infectious milk and flesh?*

Concerning milk, observers quoted and others, say it does. The juice of infected meat, injected, produced the disease as cited in the foregoing. Law, of Cornell, says the cooked meat and milk of infected animals are dangerous because of

ptomaines in them; citing cases to that effect. Calves sucking tuberculous cows did not thrive, and in those who survived, calcified tubercles were found. Another observer states there is but little danger, but the animals used in experimentation were those not easily affected. It is the consensus of opinion of the College of Physicians and Surgeons, of Philadelphia, that children are apt to be effected by intestinal tuberculosis when fed with infected milk. Fair says the germs are not killed by boiling, a protective coat of coagulated albumin being formed around them.

SEVENTH.—*Does tuberculin harm healthy cows?*

This is an important question, and not only from a hygienic, but also a monetary point of view. I am not now prepared to discuss it.

DISCUSSION.

DR. PAULUS A. IRVING rose to substantiate in a practical way, the authorities and citations given. There is hardly a doubt that bovine tuberculosis may be transmitted to man. It is the chief cause, especially in children. A practical demonstration by Dr. Niles, State Veterinarian, on the Grant herd, eight miles from the city, was witnessed by him. Out of fifty cattle injected, nine gave the reaction, and these Mr. Grant decided to kill. Post mortem, in every instance, showed marked signs of the disease. Two—one a large, healthy-appearing bull—evidenced tuberculosis not only in the cervical, but in the mesenteric glands and lungs. The remaining seven could be diagnosed almost on inspection. All killed were thoroughbreds.

To test the reliability of tuberculin, a purse was made up by the gentlemen present, and a cow that had been passed as healthy, but which was the worst looking of the lot, was purchased and killed. Not a sign of tuberculosis could be discovered. A calf of four or five months was taken from one of the slaughtered animals and examined, but it presented no appearance of the disease.

DR. JNO. N. UPSHUR thinks it is incumbent on us to allay the panic now in existence in this community regarding tuberculosis. There is no doubt we should have an inspector, but improper food and drink may be taken in and digested, the

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poisonous principle being killed by the juices. The majority of those who within the past ten years have died in Richmond, have had a minimum amount of milk and meat. He doubts if any physician present has traced a case of consumption to milk or meat. He doubts the contagiousness of tuberculosis, believing its starting point to be in malnutrition of the system, making a fertile soil for the development of the bacilli. There recently appeared a statement that the secretion of bronchitis is antagonistic to the germ. Before the war, one of the most common sights was scrofula in the negro, the older writers asserting that consumption was comparatively rare. Why weren't they affected? Since the war, all conditions surrounding them have changed—malnutrition, overcrowding, etc.—the result being phthisis, which will eventually kill the race.

DR. HUGH M. TAYLOR remarked that if it be necessary to come to some tangible conclusion, it is better for the people to be panicky. The question resolves itself into, "Are you willing to drink the milk or eat the meat of a tuberculous cow? Are we, as doctors, willing to continue delicate children on tuberculous milk, and advise our patients to eat tuberculous meat?" He has been asked for advice, then he tells of dairymen who have clean bills of health, and counsels dealing with them. He is not interested in the delicate points, and he hopes the matter will be settled by agitation, for in this way only may we have proper laws enacted. He has no doubt as to the contagiousness of tuberculosis. Time after time he has seen a healthy wife nurse an infected husband, and *vice versa*, only to follow the deceased to the grave from the same cause.

DR. UPSHUR said he did not wish it to appear that he was opposed to legislation on the subject. He objected to the production of a panic by trying to make the danger seem greater than it really is. Milk and meat is constantly subjected to boiling, and there are vital processes that antagonize the poisonous principle.

DR. J. S. WELLFORD agrees with Dr. Upshur that consumption is not contagious, and he can cite cases to prove it. One man had three wives to die of consumption, but he never had it. He can give instance after instance where members of families with a tendency, have married healthy people and

never had it, although nursing tuberculosis. He agrees, too, with Dr. Upshur regarding the harm produced among the laity, by agitation of the subject. He believes tyrotoxicon has killed more infants and children than tuberculosis.

DR. JACOB MICHAUX hasn't the slightest doubt as to the contagiousness of tuberculosis. Like Dr. Taylor, he has seen husbands contract it from their wives and *vice versa*.

Concerning its relation to food every effort should be made to impress on lawmakers the importance of laws to restrict the sale of milk and meat.

DR. GORDON, in closing the discussion, remarked that he differed with Drs. Upshur and Wellford as to the contagiousness and infectiousness of tuberculosis, believing that the disease has been proven to be both contagious and infectious. The preponderance of testimony is on this side of the question, and it is impossible not to accept the numerous and convincing operations and experiments made by the leading medical minds of the world to uphold their position. It is unscientific to argue that the disease is not contagious, because heredity frequently has some influence in its production. It is misleading to state that tuberculosis is not conveyed by milk and meat, because all who drink the milk or eat the meat of tuberculous animals, do not contract the disease. It would be equally as logical to conclude that all the inhabitants of a given section should present manifestations of malarial poisoning because a few persons did not suffer from breathing the infected air. The fact that the bacilli may not be detected in every examination of sputum, does not in any way invalidate the views held of the infectious nature of tuberculosis, whether the bacilli be the cause or the result of the disease. It must be remembered that the bacilli are found in the vast majority of cases—their absence from any given sample of sputum does not imply that they are not present somewhere in the respiratory tract, and that if none at all were found, it would not follow that the specific cause of tuberculosis was the germ *per se*, and that the poison, whatever it is, might not be conveyed by infected milk.

He could not state from personal experience whether tuberculosis ever had a deleterious influence upon healthy cows.

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The experiments made by veterinarians, however, go to prove that they are correct in asserting that no harm is done.

The reason why the negro, and especially the mulatto, is more liable to the disease at this time, is because, for many reasons, his system is unable to antagonize the poison, and because there is more of the poison in his surroundings. The practical point to be considered is, how shall we get rid of the exciting cause, which, added to the predisposing causes, lights up the disease? It is often impossible for us to control predisposing causes, but, fortunately, we are often able to remove the exciting factor.

He could not agree with Dr. Wellford that tyrotoxicon kills more infants than milk of tuberculous cows. The facility with which germs are absorbed and multiplied in milk, the demonstrated presence of the tubercle bacilli in milk, its widespread use as a food, the known and proven fact that so many infants and children die of tuberculosis,—all of these facts present us with the strongest circumstantial evidence that could be desired.

DR. GORDON said he did not wish to help in causing a panic, but if people were obliged to get into a panic because we told them simple truths in order to educate them and save their lives and the lives of their offspring, then it might be best to have a panic. The panic would not do us as much harm as tuberculous meat and milk.

As for the dairymen, he was anxious to get some legislation which would be beneficial to them as well as to the community. If possible he would have the owners paid for the condemned animals. The laws ought to bear equally on all; and he was sure our dairymen who wish to know the truth and act upon it for their own sakes as well as for the sakes of their patrons, would be willing and anxious to adopt a measure by which the whole community would be benefitted.

MARK W. PEYSER, M. D.,
Secretary and Reporter.

Editorial.

THE SPITTING NUISANCE.

An exchange contains the following item: "A Good Example.—The city of Sidney, Australia," says the *Boston Medical and Surgical Journal* "has imposed a fine of one pound sterling upon any person convicted of spitting upon the floor of public buildings or upon the street."

Such an ordinance might be carried out successfully in the antipodes, but it would prove a galling restriction on this side of the globe. Foreigners justly regard spitting as one of the most conspicuous characteristics of the American. Time and again it has been made a matter of comment by the several Post-Columbian discoverers of America. Dickens, some forty years ago, in his "American Notes," made much ill-humored mention of this objectionable Americanism.

Some of the most noted Americans have been chewers, and therefore, spitters. It is said that John Y. Mason, minister plenipotentiary from the Confederate States to the Court of St. James, during his stay in London, built up the reputation of being the most accurate spitter at long range who ever came to the shores of Briton. It was his boast that he could bury a fly at six feet with unfailing accuracy and rapidity, and without even the assistance of two finger-tips pressed against his lips to steady his aim.

Spitting is, of course, world-wide, but indiscriminate spitting is almost exclusively limited to America. The scarcity of spittoons is very noticeable in Europe, and shows plainly that there is but little use for them. The prevalence of the tobacco chewing habit in America is probably at the foundation of the spitting nuisance, but it has long since ceased to be the exciting cause. It merely set the fashion, other factors helped it on until now it is not simply an objectively disagreeable mode of ridding the mouth of the accumulated secretion of the salivary glands, plain or mixed with the expressed juices of the weed nicotian, but it has become an act that is more than mechanical—it can be made the expression of emotions.

A quick side-fling of the head with lateral expectoration is expressive of a light degree of contempt, and is much in

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vogue among young gentlemen of the Chimmey Fadden persuasion.

Elongation of the neck, retraction of the head with the hand in case the former (and it is apt to be) is of the patriarchal type, with long slow expectoration, means deliberation, and is employed to gain time in formulating a reply to an important question.

To spit several times, jerkily and in rapid succession, indicates anger or mental perturbation.

To take off the coat, roll up the sleeves and spit—loudly and emphatically upon the hands, in some parts of the country means "Walk in," in others it means "Get out quickly." A quick and furtive squirt from behind the hand means shyness, reserve, timidity.

The method of spitting through the interdental spaces with the tip of the tongue engaged between the teeth is adopted almost exclusively by negroes, and will be mentioned here only to be condemned.

Explosive spitting with the lips separated and accompanied by a blowing sound indicates inexperience, and warns the bystander to put up an umbrella.

The Board of Health of New York City and the medical press are waging war against spitting. This is eminently proper. Restrictive measures might prove of use in preventing the spread of tuberculosis, but let repressive efforts be tempered with discrimination. Don't permit the iconoclastic tendencies of the age to drag down and destroy a time honored custom of the great republic. Let not sumptuary law curtail the right of the great American tobacco-chewer. Now is a convenient time for them to form a protective association, so that by cooperation they may secure the undisturbed enjoyment of all the rights and privileges of a free man. "*Civis Americanus Sum* and can spit where I choose" is a good watchword.

OF INTEREST TO COUNTRY SUBSCRIBERS.

Yielding to the universal protest, the committee of management of the International Medical Congress of Moscow in 1897, have announced that English and German will be accepted as official languages with French and Russian. This will be a great relief to those who were preparing to couch their ideas in the Muscovite tongue.

Notes.

SPECIAL REGULATIONS FOR THE SECOND PAN-AMERICAN MEDICAL CONGRESS, TO MEET IN THE CITY OF MEXICO ON THE 16TH, 17TH, 18TH AND 19TH OF NOV. 1896.

ENROLLMENT.

ARTICLE 1. In order to be properly enrolled, each member of the Congress will pay to the Treasurer thereof in the City of Mexico, the sum of five dollars gold.

GENERAL SESSIONS.

ART. 2. There will be one opening session, one closing and one intermediate session of a purely scientific character.

ART. 3. The opening session, which will be of a solemn character and presided over by the Supreme authority of the Nation, besides being attended by the members of the Congress, will also be attended by the members of scientific societies, and other distinguished persons who may be invited. The session will be opened with the report of the General Secretary.

This will be followed by a speech of welcome, pronounced by the President of the Congress.

Two members will then speak on scientific subjects, and they will be followed by a speech from the President of the Republic. It is strongly recommended that the scientific speeches should be of short duration.

The intervals between the speeches will be filled up with musical performances.

ART. 4. At the closing session, the General Secretary will notify the place designated by the Congress for holding the third meeting.

ART. 5. The Treasurer will present his accounts to the Congress, showing the disbursements made of the funds entrusted to his care.

ART. 6. A scientific speech will be delivered and a short speech by one representative of each one of the nations attending the Congress.

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ART. 7. In the intermediate session, four speeches will be delivered on general matters, by persons who are highly distinguished in medical science, and who, having been in due time invited to do so, have accepted the commisson; one of these speeches being pronounced by a Mexican physician, who shall be invited to do so by the Committee of Management.

ART. 8. No discussions will be held in the General Sessions.

SESSIONS OF THE SECTIONS.

ART. 9. These sessions will be held from 9 to 12 A. M. and from 3 to 5 P. M., in the places that may be designated by the Organizing Committee. They shall be presided over by the President of each section, alternating with the Vice-Presidents of each one of the nations that are represented in the respective sections.

ART. 10. The person who may be appointed by the Committee of Organization, will be the *ex-officio* Secretary of each section, and he will fill his post alternately with the Secretaries of the nations who may be represented in the sections; but should the latter not be present, their places will be supplied by the President in office.

ART. 11. The President will direct the discussion in accordance with the order of the day, and will decide all questions that may arise, and that may not be provided for in these regulations.

ART. 12. The *ex-officio* Secretary will make out the minutes and for that purpose, besides his own notes, will collect those of the Secretaries who may have acted in the sections. He will also collect from the persons who may have spoken, the written extracts referred to in ART. 16.

ART. 13. All questions relating to the debates, which are not provided for in these Regulations, will be decided in accordance with general parliamentary practice.,

ART. 14. The voting will be by name or by putting the question.

PAPPERS, EXTRACTS THEREOF AND DISCUSSIONS IN THE SESSIONS OF THE SECTIONS.

ART. 15. All papers will be presented in writing.

ART. 16. Each author will forward to the Secretary of the Organizing Committee in the City of Mexico, and before the first day of August of the present year, an extract not ex-

ceeding 300 words, of the paper to be presented by him. These extracts will be printed in English, French and Spanish, and will be distributed to the members of the Congress before the session in which they are to be read.

ART. 17. No paper will be announced which is not accompanied by this extract; but the authors who comply with these conditions will have a right to have their work published intact in the transactions of the Congress.

ART. 18. The reading of the papers in the sessions must not last more than twenty minutes; when the papers are so long that they cannot be read within that time, the authors will give extracts from them, either in writing or by speech; but they will be published intact in the transactions of the Congress, and in the language in which they have been written.

VIVISECTION.

FROM THE MINUTES OF THE AMERICAN ACADEMY OF MEDICINE FOR MAY, 1896.

(Advance sheet from the Bulletin of the Academy.)

The following resolutions, presented by Dr. Gould, and recommended by the Council, were discussed and adopted unanimously:

Resolved, That the American Academy of Medicine desires to express its opinion that no legislation is required or desirable in the United States in regard to the so-called practice or subject of "Vivisection," and for the following reasons:

1. Because only by careful discrimination and collection of facts can public and legislative opinion be truthfully formed. To illustrate but a single of many popular errors upon this subject: the dissection or use of dead aniamls by scientific men is termed "vivisection," when the same proceeding carried out by the butcher, the hunter, the restaurant keeper, cooks, etc., does not enter into the consideration, neither do the cruelties in the use and keeping of domestic animals, nor those in the deaths of animals for other purposes than those of experimental medicine

2. While admitting and deploring the facts of abuses in the past and in some European countries,—to a very limited extent also in America—it is the conscientious belief of the members of the Academy that at present with us such abuses do not exist, nor are they in danger of occurring, to a degree justifying or calling for legislation as, under the circumstances, the evils that would inevitably result from such legislation would greatly exceed the benefits to be obtained by it. The charge implied or openly made that physicians, either in theory or in practice are more cruel than other classes of the community, is a fancy or prejudice of ignorance which cannot be proved, and which we strenuously deny..

3. Legislation upon the subject of cruelty to animals should be so framed as to include consideration of cruelties infinitely greater and more extensive in many other fields of human activity at present not actively objected to by those who urge legislation as regards experimental medicine. Not only this, but legislation concerning these matters should be broadened out in order to prevent the destruction of species of birds and other animals by the votaries of fashion, by the hunters, etc., to prevent derangement of the delicate balance of animal and vegetable life upon which civilization ultimately and largely rests, to prevent deforestation of the head-waters of our streams, to establish sanctuaries or resorts for animals, and many such biologic requisites,—as also to establish such arrangements with other nations as will ensure their permanent and extensive effectualization.

4. Legislation upon a subject of vital importance to a peculiarly technical branch of sciences should be framed under the guidance and by the aid of those who by education and experience are alone fitted and capable of forming and expressing sound judgment upon it, *i. e.*, the experts in the special subject. It would be as absurd to have legislation as to vaccination, inspired and shaped by laymen who were anti-vaccinationists, without weighing the opinion of the medical profession, as to allow legislation upon the question of vivisection by laymen who are anti-vivisectionists, and even inexpert in any branch of inductive science.

5. The American Academy of Medicine therefore urges its members and physicians generally to write to their repre-

sentatives in Congress, (or wherever legislation of the kind in question is proposed), and otherwise seek to influence public and official opinion against the passage of a particularly ill-advised bill before Congress, to wit, Senate Bill No. 1552, introduced by Mr. McMillan, entitled "A Bill for the Further Prevention of Cruelty to Animals in the District of Columbia." In the opinion of the Academy the pasage of this bill would be harmful to the true interests of medical and social science and to the public health.

The Mississippi Valley Medical Association.—A meeting of the Executive Committee of the Misisippi Valley Medical Association was held at Atlanta, on May 6th, and the following gentlemen were appointed to deliver addresses: Dr. H. N. Moyer, Chicago, Address on Medicine; Dr. Horace H. Grant, Louisville, Address on Surgery. The indications are that the meeting to be held at St. Paul, on October 20, 21, 22 and 23, will be the largest and most successful in the history of the Association. As all the railroads will offer reduced rates for the round trip, an opportunity will be given to visit St. Paul and Minnesota during the most delightful season of the year.

C. A. WHEATON, M. D., St. Paul, Minn.,
Chairman Committee of Arrangements.
H. O. WALKER, M. D., Detroit, Mich., President,
H. W. LOEB, M. D., 3559 Olive Street, St. Louis, Secretary.

The Texas Medical Journal, or the "Red Back," as its editor affectionately styles it, is just now greatly exercised over insinuations cast upon it by a contemporary medical publication in the same State. Texas is a big State, but it does not include the earth, and there are a few people left to whom the affairs of Dr. Daniel and the *Texas Medical News* are of no consequence whatever. Why not hire a hall and talk it out. It would settle the matter quickly and would save the non-union printer of the "Red Back" a big lot of work. We notice that Dr. Daniel is a dermatoloigst; perhaps this accounts for his bitterness.

Dr. S. G. C. Pinckney has been appointed lecturer on diseases of the mind and nervous system at the Southern Medical College. The following changes have been made in the faculty of the Southern Medical College: Dr. W. S. Crowe elected Professor of Obstetrics and Clinical Gynecology; Dr. J. G. Garnest, Professor of Gynecology; Dr. J. C. Olmsted, Prof. of Physiology; Mr. E. L. McCandless, Prof. of Chemistry; Dr. C. D. Hurt, Prof. of Materia Medica; Dr. Floyd W. McRae, Prof. of Diseases of the Rectum.

Professor Dr. Don Francisco Bastillos, Calle de Tacuba No. 7, Ciudad de Mexico, D. F., Republaca Mexicana, has been elected Treasurer of the Second Pan-American Medical Congress to be held in the City of Mexico the 16th of November.

All members residing in the United States and Canada, and others, who contemplate attending, should forward the registration fee, $5, gold, to him at once, and notify Dr. C. A. L. Reed, Cincinnati.

Dr. H. F. Harris has resigned the chair of chemistry in the Southern Medical College to accept the adjunct professorship of pathology at the Jefferson Medical College, Philadelphia. It is with profound regret that we regard this contemplated change, for Atlanta will lose thereby her most skillful pathologist, and the cause of higher medical education in the South one of its most active and efficient supporters. We wish for Dr. Harris every success in his enlarged sphere of usefulness.

Dr. Hunter P. Cooper has been elected to the chair of anatomy and clinical surgery at the Atlanta Medical College, to fill the vacancy occasioned by the death of Dr. W. S. Armstrong. Dr. Cooper is a surgeon of ability and large experience, and will prove a worthy successor to the lamented Armstrong.

Dr. L. B. Grandy has gone to New York to take a course in the eye, ear, nose and throat.

Book Reviews.

A TREATISE ON THE MEDICAL AND SURGICAL DISEASES OF INFANCY AND CHILDREN. By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children, Bellevue Hospital Medical College, Physician to Charity Hospital, etc. Eighth Edition, Thoroughly Revised and Greatly Enlarged. With 273 illustrations and 4 plates. New York and Philadelphia: Lee Bros. & Co., 1896.

A large number of recent and pretentious notes upon the diseases of childhood have recently been published, but none of them have displaced the present work, nor are they likely to do so. No man has written more clearly and concisely upon the diseases of children than J. Lewis Smith, and this eighth edition of his work comes to us after a careful and thorough revision, with portions of the seventh edition rewritten, while some entirely new matter has been added; notably, the Surgical Diseases of Childhood. This portion of the work is contributed by Dr. Stephen Smith. Dr. F. M. Warner has contributed a section on Diseases of the Blood, this being among the last work done by him prior to his death.

A very large number of new illustrations have been added, while the defective old ones were withdrawn. All portions of the work are brought fully up to date, and altogether the eighth edition is notably superior to all former editions and we cannot too heartily commend the author's last effort to the profession.

TWENTIETH-CENTURY PRACTICE OF MEDICINE. VOL. VI. Diseases of the Respiratory Organs. New York: Wm. Wood & Co.

According to the publishers, "Owing to unforeseen difficulties in the preparation of Vol. V., it has been found necessary to issue Vol. VI. out of its natural order."

This volume treats of the diseases of the following organs: The Nose: the Accessory Sinuses of the Nose, Naso-pharynx, Pharynx, Ear, Tonsils, Larynx, Trachea and Bronchial Tubes, Lungs. The men who have been assigned to the treatment of these various subjects are all men of reputation and ability, which is fully exemplified in the manner in which the subjects are treated. The pathology and treatment are thoroughly up to date, and this volume we can recommend as a valuable addition to any physician's library, especially such as do rhinological and laryngological work. The contributors are to be congratulated upon the thoroughness of their work.

D. R.

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BUSINESS DEPARTMENT.

Address all letters relative to business matters and make all money orders payable to Louis H. Jones, M. D.

If the SOUTHERN MEDICAL RECORD is sent to any one who does not wish it, or beyond the time he intends to pay for it, the editor must be informed directly to stop it. It will not be sent knowingly to any one who does not wish it, but if notice is not given to discontinue payment will be required for the time it is sent.

ATTENTION.—All communications and all matters pertaining to this department must reach us by the 20th of the month to insure insertion in the following month's issue.

Special Notes.

SANDERS SON'S EUCALYPTON EXTRACT (EUCALYPOL).—Whenever mention is made of Oil of Eucalyptus, we beg you to bear in mind that such reference applies to our preparation, styled for distinction, Eucalypti Extract (Eucalyptol.) To avoid disappointment, we would suggest to specify when prescribing, our manufacture. Samples gratis through Dr. Sanders, Dillon, Iowa. MEYER BROS. DRUG CO.
St. Louis, Mo.

KOLA-KOLOID.

Editor Prescription:—In a late issue of the *Prescription*, Dr. Johnson calls attention to the use of Kola-Koloid in a case of melancholia. Although I have never used it in cases of insanity of that nature, I have repeatedly seen a marked effect in the amelioration of those minor cases of melancholy called the "blues." Frequently after a single dose the whole moral atmosphere will be changed. The preparation, one of Theodore Metcalf Co.'s, has a wide therapeutical range, being applicable in a large number of cases where mental or physical exhaustion are prominent symptoms. I have had occasion to test its value in my own case during the past year.

There never was a more comprehensive description of la Grippe than the hibernianism. "It is a disease where you feel worse when you are getting better, and it takes six months to get well after you are cured." Those who have had a per-

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sonal experience with the disease can appreciate the truth of it.

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Providence, R. I., May 14, 1896.

FUNCTIONAL HEART DISEASE.

It is truthfully said that heart troubles of this character are certainly increasing among Americans. This, to some extent, may be due to the worry and excitement of business life, but it is more frequently the result of disordered digestion and poor assimilation, which always impoverishes and poisons the blood, and that irritates and weakens the heart.

The fermentation of half-digested food causes an accumulation of gas in the stomach, produces distention and increased upward pressure. This interferes with free action of the heart and lungs, producing irregularity, and shortness of breath.

The indications in the treatment of all functional heart troubles dependent upon stomach derangement are, to improve the digestion, and encourage a prompt assimilation of food.

This can be most effectually done by the regular use of Elixir Maltopepsine (Tilden's), which exerts a direct influence upon the organs of nutrition, and brings the impoverished blood up to the normal standard; hence, less sympathetic and pneumogastric irritation.

Messrs. E. J. Hussey & Co. have sent us a sample of their Pri-mo Lady's Syringe. It is a most ingenious device for facilitating the use of vaginal injections. In its use there is no danger of scalding the vulva with hot water, so that water of a temperature that could not be tolerated otherwise may be freely employed. It dispenses with the cumbersome douche pan, and altogether greatly lessens the irksomeness of frequently repeated vaginal irrigation.

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BILIOUSNESS.

℞. Sodii sulphat.,
Potassii et sodii tart ..aa ℥j.
Infusi cascarillæ.....℥viij.

M. Sig.: Two tablespoonfuls three times daily.—FOTHERGILL.

DIABETES MELLITUS.

℞. Lithii carbonat.....gr. xxx.
Sodii arseniat.....gr. j.
Ext. gentianæ .....gr. xv.

M. Ft. massa et in pil. no. xx div. Sig.: One pill morning and evening.—VIGIER, *Annual Univ. Med. Sci.*

DIARRHŒA, CHILDREN.

℞. Magnesii sulphat.....℥j.
Tinct. rhei .....℥j.
Syr. zingiberis.....℥j.
Aquæ carui.....℥ix.

M. Sig.: A teaspoonful three times daily, to a child one year old.—WEST.

DYSENTERY.

℞. Cupri sulphat.....gr. ss.
Magnesii sulphat.....℥j.
Acidi sulphurici dil.....℥j.
Aquæ.....℥iv.

M. Sig.: A tablespoon every four hours. (*In acute form.*)—BARTHOLOW.

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HÆMOPTYSIS.

℞. Ext. ergotæ fld..... ℥j.
Olei gaultheriæ.....gtt. iv.
M. Sig.: A teaspoonful every hour at first; then every four to six hours.—RINGER.

HEART DISEASE.

℞. Ferri redacti,
Pulv. digitalis fol. (English),
Quiniæ sulphatis.....aa ℈j.
Pulv. scillæ ....gr. x.
M. Ft. massa et in pil. no. xx div.
Sig.: A pill three or four times daily. (*In fatty heart, dilatation of cavities, and mitral regurgitation, with anæmia.*)—BARTHOLOW.

WORMS.

℞. Olei terebinthinæ,
Oleoresinæ filicis maris, aa ℥j.
Mucilag. acaciæ..... ℥ij.
M. Ft. emulsio.
Sig.: Day before treatment, a milk or thin soup diet, and one drachm of compound jalap-powder. The emulsion is taken the following morning, fasting, and a half-hour later a dose of castor oil. (*For tape worm.*)—F. A. A. SMITH, *Annual Univ. Med. Sci.*

ORCHITIS.

℞. Antimonii et potassii tart. gr. j.
Aquæ ..... ℥viij.
M. Sig.: One or two teaspoonfuls every hour or two.—RINGER.

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